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BOOKLET 5

DIVISION OF COLLECTIONS AND SERVICES

SECTION OF ACQUISITION AND EXCHANGE

Session 143 Wednesday 22 August 11:15-13:45

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Ulla Højsgaard, Danish Institute
for International Exchange of
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Survey of International Exchange of Non-official Publications: progress report

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Abstract

The "Working Group on International Exchange of Non-official Publications" is presented together with the intentions behind the decision to conduct an international survey. The objectives of the survey are to study the economy of international exchange of publications in relation to other means of acquisition as part of collection development and management. The contents of the survey are given and the way in which it has been prepared and conducted is discussed.

The reply rate has been most satisfactory but at this stage only very basic results are available. Qualitative results call for careful handling of the databases and for subdivision into clusters of comparable data. Further results and a proposal for a seminar in connection with the IFLA meeting in Moscow 1991 will be given at the Stockholm meeting.

At the IFLA meeting in Brighton in 1987 a suggestion was made that the name of our section be changed from "Acquisition and Exchange" to "Acquisition" alone. As exchange is one way of acquiring library materials work on exchange would still be included. The intention behind the suggestion was to emphasize more dynamic work directed towards the informations market and to enhance the prestige of the section.

As exchange of publications is of major concern to large numbers of IFLA-members the proposal fell.

The attitude to exchange of publications as a costly way of acquiring marginal material provided the necessary challenge to exchange librarians on the standing committee who with some concern had noticed the increasing aversion towards exchange based on generalisations rather than substantiated facts.

Exchange of publications has two – often contradictory – objectives: to promote own publications and to receive something useful in return. If a library processes material received on exchange that would otherwise not have been included in the collections, acquisitions policies rather than exchange as acquisitions method are to be blamed.

Evaluation of exchange in relation to other means of acquisition based on facts rather than myths should thus be of major concern to any library and members of the section decided to form a "Working Group on International Exchange of Non-official Publications".

Members of the working-group were from the beginning:

Peter H. Bridge, The Library of Congress, USA; Karl-Heinz Jügel, University Library, Rostock, DDR; Marie-Simone Régnier, Bibliothèque Nationale, Paris, France; Sieglinde E.H. Rooney, Edmonton University Library, Alberta, Canada; Ulla Højsgaard, IDE, Danish Institute for International Exchange of Publications, Copenhagen, Denmark. In 1989 Peter H. Bridge left the standing committee and Judy McDermott also from The Library of Congress has joined the SC and the working group in his place.

We decided to make an extensive survey on international exchange of non-official publica-

tions, and that the results should form a basis for further and more detailed studies.

The objective of the survey was to provide information on the economy of international exchange in relation to other means of acquisition as part of collection development:

A questionnaire in English was prepared through collective efforts and the final text agreed upon at the IFLA-meeting in Sydney. Sieglinde Rooney from the University Library, Edmonton, Canada made major contributions and edited the final version of the text. During the following period the text was translated into French, German, Russian and Spanish. Working group members from Bibliothèque Nationale in Paris, the University Library in Rostock, and The Library of Congress took on this responsibility.

As we all know some countries depend heavily on international exchange due to closed or weak economies and we wanted to be able to obtain information enabling us to analyse the results country by country and region by region.

It was thus decided that the questionnaire should be sent to all research libraries holding IFLA membership and that this mailing list should be supplemented with Soviet and Eastern European libraries. Karl-Heinz Jügelt of the Rostock University Library provided addresses that should ensure a certain regional balance. We were well aware of the fact, that developing countries and their special problems could not be covered directly through the survey, but anticipated that the results could be used to detect whether special studies should be carried out.

The survey contains 60 major questions, many of which are subdivided, organized in six main categories:

Scope

- Exchange or not exchange
- Why not exchange – facts and attitudes
- Exchange by library type and geographical area (number of partners)
- Organization of international exchange at the national level

Administration

- Organization of international exchange within the libraries:
Staff-resources: acquisitions/exchange respectively
Automation: acquisitions/exchange respectively

Collection management

- Policies
- Materials exchanged: types of material
- Acquisition of materials for exchange: cost of material in relation to total acquisitions budget
- Amount of material sent and received through international exchange in relation to total acquisitions budget
- Balancing exchange agreements
- Evaluation of exchange agreements

National centres for International exchange

Suggestions for future studies on international exchange

Interest in a one-day seminar

The questionnaire was sent to 861 libraries in 108 countries in June 1989 by IDE The Danish Institute for International Exchange of Publications and a reminder was sent in September

1989. By May 1990 430 replies from 69 countries have been returned which is a reply rate of 50 %. This is considered most satisfactory taking the size of the survey and the reply-rate of similar surveys of about 45–50 % into consideration. Most of the countries from which the survey has not been returned are third world countries, which indicates that a special study, as anticipated, should be made. Unfortunately replies have not been received from any of the six Romanian libraries on the mailing list. A renewed effort to include Romanian libraries in the survey is made. Of the 460 surveys 22 came from libraries that should not have had the survey at all and two were returned without name and address of the library. 265 of the remaining 406 have an exchange programme and it is anticipated that a major part of the libraries which have not returned the survey do not conduct international exchange on a larger scale.

All replies have been keyed into a PC using dBASEIII software. Three databases have been constructed as the maximum number of fields in each database is 128. The three databases are linked together through identical fields containing information on the libraries:

- country
- region
- library type
- library number

The replies contain much supplementary information which has been translated into English. We have to add a field on language as discrepancies between the 5 versions of the survey have appeared in connection with the handling of the replies. Although extra work is involved many more misunderstanding would most likely have occurred if the survey had been in English only.

So far only simple figures have been extracted from the data:

265 conduct exchange

111 does not conduct exchange

30 have extremely limited exchange

Of the 141 “negative” replies 51 have no free material to offer, 30 prefer purchase and 26 do not regard exchange cost-effective. 34 give other reasons, some are not allowed to conduct international exchange and some hope to establish programmes. Roughly half of the positive replies have less than 150 international exchange partners, 22 have between 150 and 200, and 127 have more than 200. Library of Congress alone has 15.000 partners.

To be able to establish regional patterns of international exchange we have asked for an estimation of the number of exchange partners in geographical regions as defined in “Demographic Yearbook”, 1985. Although some libraries have not been able to make this estimate it will be possible to establish patterns of the flow of material within and between geographical regions.

National exchange centres are widely used but only 29 indicate that they cooperate solely with national centres.

Organization of exchange falls within estimated patterns and it is still too early to tell whether one way of organizing exchange is more economical than others. As expected the proportion of professional staff in relation to support staff is higher for exchange than for acquisitions in general, but these figures must be seen in relation to proportion of exchange of total acquisitions and in relation to regions.

Almost 25 % have rationalized exchange procedures within the last 5 years but the reduction in staff time is insignificant. Some automation has taken place of acquisitions procedures especially for monographs but also for periodicals and for exchange and 52 % expect to have automated exchange procedures within the next 5 years. The reduction in staff time as a

consequence of automation is insignificant too.

Simple counts show that enormous amounts of publications are exchanged internationally, as almost 330.000 periodical titles (how many identical titles can of course not be given) are received on exchange and almost 260.000 are sent. 358.000 new imprints of monographs are received and almost 458.000 are sent.

Many libraries are interested in future studies on the economy and organization of international exchange based on the survey, and 126 libraries welcome the opportunity to participate in a seminar.

More data will be available before the IFLA-meeting in Stockholm but it can already be established that qualitative evaluation calls for intensive work and careful handling of the data.

Geographical regions and the information on library type seem at this stage to be important tools for future work as clusters of data can be compared.

So far none of the questions asked seem redundant, some might have been phrased in a different way and a pilot project should probably have been carried out among the members of the working group. This would have meant that some of the methodological problems would have been eliminated.

On the other hand, had that been the case we would have found out how much work is involved and we might never have ventured to carry out a full scale survey.

Although reliable general results can not be given at this stage, more detailed results will be presented at the IFLA meeting in Stockholm and the Working Group will be able to present and discuss the program for a full day seminar in connection with the IFLA meeting in Moscow next year.

Buying Media for Everyone

Public library acquisition in Scandinavia

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Abstract

The lecture deals with media acquisitions by public libraries in the Scandinavian countries, with the emphasis on conditions in Sweden. Acquisition volumes and the distribution of different types of media are discussed. Other topics considered are the work of selection, the question of quality, developments in the field of video, media for various handicapped groups, and service to immigrants. In addition, the paper discusses the increased interest in the way the media stock actually functions and how it can best be presented.

Is it possible to buy media for everyone? The task of school libraries and research libraries may be easier in this respect. They have clearly defined target groups with well formulated needs. Public libraries are intended for everyone. Our visitors can be of any age from 0 to 100. They can be interested in any subject under the sun, at any level from the most elementary to the most advanced. There are many groups of handicapped people, each of them requiring specially adapted media. Our visitors can speak any one of at least a hundred languages.

Buying media is a difficult task, but it also brings stimulation and fun. It is even such fun that we ourselves have begun to suspect that we may be devoting too much of our energy and time to selecting and buying media, and too little to putting them into circulation once they end up on our shelves. It goes without saying that it is not possible to give an exhaustive account of public library acquisition in Scandinavia in a single lecture. I have chosen to provide a general overview and then deal with some shared features and current trends. Since I work in a Swedish library I shall mostly be discussing conditions in Sweden, but I shall also take an occasional look for comparative purposes at other countries in Scandinavia.

Acquisition, volumes and the distribution of different types of media

Those who want a general view of public libraries in Scandinavia now have a new aid. A project group in the Nordic Statistical Secretariat has produced library statistics for Scandinavia, which appeared last autumn in a trial edition covering the year 1987. This gives us an easy way to compare acquisition and lending in the Nordic libraries. In 1987 the growth of books and audio-visual media in Denmark's libraries was 500 per 1.000 inhabitants, in Finland 532, and in Sweden 304. No details were available for Norway. The acquisitions were distributed as follows in Denmark: 55 % adult literature, 36 % children's literature and 9 % audio-visual media. The distribution in Sweden was 59 % adult literature, 36 % children's literature and 5 % audio-visual media. Purchases in Finland were 93 % books and 7 % audio-visual media (the Finnish acquisition statistics do not separate children's literature from adults').

It is obvious that visitors to Danish and Finnish libraries are very fortunate. They have nearly twice as many new books to choose from as library visitors in Sweden. Naturally they also borrow twice as much. In 1987 the Danes borrowed 18.2 volumes per inhabitant, the Finns 17 volumes per inhabitant, and the Swedes 8.8 volumes. In Norway the figure was 4.4

volumes. It can therefore be assumed that the number of acquisitions in Norway is lower than in Sweden. However, the Swedes use their libraries as much as the Finns. About 63 % of the population in both countries visit their libraries.

Each year the Swedish National Council for Cultural Affairs publishes a report on the situation of the book in the country. The latest report presents the tendencies in library acquisition in the period 1980–1987. Book acquisitions have varied with no definite tendency. The stock of audio-visual media has increased sharply, especially talking books, which have increased by 173 % to 500.000 units. The increase is doubtless due to a special state subsidy for the purchase of talking books. Video tapes have increased during the period from 250 to 5.000 units, which is still a very low figure in an international perspective. Books still predominate totally, whereas audio-visual media make up only 3.5 of the stock. Subscriptions to newspapers and periodicals have increased in the 1980s by 14 % to 140.000. Purchases of musical recordings have decreased slightly.

Books are expensive in Scandinavia. The average price of an adult book in Sweden is about \$ 26. A new novel normally costs about \$ 40. The Scandinavian languages are spoken by relatively few people, so books are published in small editions, which puts the price up. The number of titles in Swedish which are of general interest is about 5.000 a year. On top of this, we Scandinavians are deplorably bad at reading each other's languages, which could otherwise have broadened the book-market. Moreover, as a result of customs duties and currency exchange, books become almost twice as expensive when they are sold in another Scandinavian country. And, as we have seen, they are not cheap to begin with.

The organization of purchasing

Most public libraries in Sweden buy the mayor part of their books and other media through Bibliotekstjänst (Library Service Ltd) and its collective binding service. Bibliotekstjänst, which is owned by the Swedish Library Association and the Swedish Association of Local Authorities, offers the libraries a complete service for selection, purchasing, classification, cataloguing, binding and equipment.

Similar services – although taking somewhat different forms – exist also in Denmark, way and Finland. Bibliotekstjänst regularly issues lists of books and audio-visual media with brief reviews. As regards Swedish books, everything that the publishers judge to be of interest to Swedish libraries is presented. As regards foreign books and audio-visual media, a selection is presented.

These collective binding lists make it possible for the libraries to monitor, at a reasonable expenditure of labour, at least all the *Swedish* books that are published. Decisions about purchases are generally made by a purchasing committee on which the library's departments and branches are represented. Book purchasing meetings are planned so that they tie in with Bibliotekstjänst's ordering periods. The collective binding lists and the books meetings have long been the cornerstones of purchasing work. In recent years, however, voices have begun to discuss and question this. A major project entitled "Emergency Slaughtering of sacred cows", which is entirely about media acquisition, has recently been completed. Part of the project was about buying media without book meetings, and another part was about managing without the collective binding list. The project was carried out in Örebro County under the leadership of Lena Skoglund and is described in *Scandinavian Public Library Quarterly* 1989:4.

As regards foreign literature, the collective binding lists are inadequate for larger libraries, such as Malmö stadsbibliotek, where I myself work. For us it is absolutely necessary to follow book issues through newspapers and journals from each country. We have contacts with booksellers in some forty countries. When it comes to purchases in languages which the staff

do not know, we engage consultants, usually home language teachers. Malmö stadsbibliotek buys about 10.000 titles a year of which half are Swedish, half in other languages. The Swedish titles, of course, are bought in many more copies.

The question of quality

The Scandinavian libraries have their root in public education. Most libraries have politically decided guide-lines for the choice of media, the essence of which is to strive for good quality. With respect to non-fiction this is uncontroversial. Nobody wants bad non-fiction with incorrect data. When it comes to fiction, on the other hand, there are often conflicts between the library's acquisition policy and the wishes of the borrowers. You will have to look long and hard in Scandinavian libraries to find Jackie Collins, Judith Krantz, or Sidney Sheldon, and indeed you will scarcely find them at all in Norway or Sweden. The debate about the quality policy of the Swedish libraries is conducted on two fronts. Some library visitors and certain journalists claim that the libraries are snobbish and exercise censorship, and that people ought to be able to get what they want in the libraries. On the other hand, authors, intellectuals and other journalists claim that the libraries are in fact commercial and populist, and that they fail in their task of promoting serious literature and out-of-the-ordinary authors. When Jackie Collins was invited to the Book and Library Fair in Gothenburg last autumn, you can imagine the endless debate this provoked in our newspapers.

Of course, one may wonder why the quality question is so hotly debated in the Nordic countries when people elsewhere hardly bother about it. I can think of two reasons. Firstly, the number of books published in the Scandinavian languages is rather small. In Sweden there are about 5.000 titles per year that are relevant to the libraries. Only a small proportion of this is fiction. This means that it is possible to have a general view of the entire stock and to assess each title. Secondly, in small language areas the libraries also play an important role in national literature. Assistant professor Pertti Vakkari has examined this topic in an article entitled "The role of the Public Library in the Finnish Book Culture". He writes: "The library in Finland has a central role in guaranteeing the availability and accessibility of high-quality, varied literature and thus in maintaining and promoting reading activity".

The lending chain

It is impossible for a library to be self-sufficient as regards media. It would be irrational and uneconomical to try to be. The network is highly important. The municipal libraries in Sweden obtain help from the county libraries with interlibrary loans and deposits. The next link in the chain is the three lending centres, each of which lends media and arrange loans from research libraries and specialist libraries in Sweden and abroad. The lending chain has a somewhat different structure in other Scandinavian countries, but the principle is the same. What the municipal libraries primarily need to borrow from the county library is specialist literature, books in foreign languages, and media for various handicapped groups. Most municipalities in Sweden are so small that it would not be practical for the local library to build up its own stock for groups with special needs. There are 284 municipalities in Sweden, of which 166 have fewer than 20.000 inhabitants. The other Scandinavian countries have even more, even smaller municipalities.

Both municipal libraries of different sizes and county libraries take the lending chain into account in their buying policy. In recent years there has been an effort in Sweden to determine in a more organized and systematic way than before, the different spheres of responsibility of municipal libraries and county libraries as regards various types of media. The proposal to develop such media supply plans was put forward in a state inquiry into public

libraries back in 1984. Plans have then been established in several counties. I shall return to this later.

Media for various groups of handicapped people

As regards media for various groups of handicapped people, the Scandinavian libraries are in the forefront of development. In Sweden some 3.000 talking books are produced annually. Everybody with a handicap which makes it hard to read a printed book is entitled to borrow a talking book from Swedish libraries. Apart from the visually handicapped, this applies to aphasics, the physically and the mentally handicapped and people with difficulties in reading and writing. Special talking books are produced and adapted to the needs of the mentally handicapped. For this group also easily read printed books have been produced for years in Sweden. Similar production has also begun or is planned in other Scandinavian countries. Videos with sign language for the deaf are being produced on an ever larger scale. Editions of specially adapted media are of necessity small and can therefore scarcely be produced without state aid. The production of large-print books is not subsidized in this way, with the result that little is produced.

Libraries in Scandinavia see it as one of their central tasks to offer adequate media to the handicapped. The county libraries play an important role here, since the target groups are generally small in the municipalities. In 1985 the county libraries received a state subsidy to build up their stocks of talking books. One condition for the subsidy was the elaboration of a media supply plan for talking books in the county. These plans thus exist in all 24 counties in Sweden. They have become models for similar plans for other types of media.

Video

A much discussed question in the libraries in Scandinavia is how we are to handle video. In this area we lag far behind development in England and the USA. In Scandinavia, Denmark and Finland have come further than Sweden. In Denmark a large number of libraries have reached an agreement with the State Film Centre. In Finland the Ministry of Education set up a committee in 1982 to consider what cultural policy the government should implement in the sphere of video. The committee concluded that the libraries were a suitable channel for video. Experiments were carried out in collaboration with the Finnish Broadcasting Corporation between 1985 and 1987. Video tapes could be either borrowed or viewed in the library.

The material was used extensively. Most popular were the classical feature films – both Finnish and foreign – and children's films. The lending of video tapes did not bring the library as many new borrowers as they had expected. It was the people who already used many of the other library services who also borrowed video tapes.

As a consequence of the experiment, an agreement has been concluded between the Finnish Broadcasting Corporation and the Association of Local Authorities concerning the provision of video. Some time ago a similar agreement was reached in Sweden as well. The video question in Finland has been discussed by Keijo Perälä in an article entitled "Video Material in Finnish Libraries" in *Scandinavian Public Library Quarterly* 1989, no 3. There is no doubt that video will play a very important role in the Scandinavian libraries as time goes on. There are however two obstacles. One is the intricate body of copyright rules. The other is that it is hard to build up a reasonable stock without financing it by charging for loans, and charging for loans is against the tradition of Scandinavian public libraries.

Bookstock management

The libraries have always striven to offer the best of all media. With the aim of putting together a good stock, the main interest has long been directed to the work of selection.

Librarians have kept track of what is published and bought books which get good reviews. We may have cared too little about what our shelves look like and how the media stock actually functions when it ends up on the shelves. Naturally, the expected demands has been considered in decisions about purchases, but now it is done more systematically.

A whole range of activities intended to investigate how the media stock functions have become common in our libraries. We produce statistics and investigate systematically which books and subjects are popular and which stand gathering dust on the shelves. We ask our borrowers through questionnaires and interviews whether they have found what they were looking for, or if they are dissatisfied and want something else.

Lena Skoglund has conducted a major survey of visitors to the specialist room for medicine, science, technology and economics at Gothenburg City Library. She observes that the visitors were not primarily looking for scholarly or theoretical books. What they wanted was, on the one hand, literature providing a basic survey of a subject, and on the other hand, practically oriented books giving help when theories are to be converted into practical action. The report also observes that the library is an important aid for self-instruction.

A group of county libraries and municipal libraries in Sweden are working out new measurement methods to develop and rationalize library service. One of the sources of inspiration has been Professor Nick Moore from Birmingham Polytechnic, who has been influential in starting the discussion about bookstock management in Sweden.

The aim to activate the media stock also has repercussions on the library buildings and their furnishings. It must be made easier for visitors to find what they are looking for. The material must be grouped and displayed in new ways to arouse interest and the environment must be constantly changed. The three-section library in Gütersloh has given much inspiration.

Service for immigrants

Library service for immigrants in Sweden have been built up according to the principles of equality, freedom of choice, and participation. This has been interpreted as meaning that there must be as many volumes per immigrant of literature in the various immigrant languages as there are volumes of Swedish literature per inhabitant. In this area too, we find a trend towards the adaptation of service to the real needs in each language group.

A project entitled "Once an immigrant – always an immigrant?" has recently been concluded at Malmö stadsbibliotek. The aim of the project was to investigate which media different language groups use and request. The surveying methods were both interviews and statistical measurements. The results show that newspapers, periodicals, music and video tapes are at least as important as books for preserving one's own culture and contacts with one's country of origin. Non-fiction is read much less than fiction, especially by immigrants who have been in Sweden for some years.

In many counties media supply plans have been elaborated for media in immigrant languages. In Malmöhus County, where I work, this means that the municipal libraries are responsible for subscribing to newspapers and periodicals, while the county library buys books which are sent out as deposits to the municipal libraries. The results of the project will lead to changes in our plan.

Conclusion

Choosing and buying media for knowledge and enjoyment, and presenting them to visitors – this is the core of library work. It is a matter of giving each visitor what he or she wants for his or her personal development and interests. I would like to conclude by quoting an advertisement from our famous airline company, Scandinavian Airlines System: "Perhaps you have already noticed that SAS has a world-wide drive for the nineties – to see in every customer a

person with his or her very own individual service demands". I find it excellent that SAS has discovered this and is advertising for staff with this orientation. It must be said, however, that this has long been natural for the libraries in Scandinavia.

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The Conflict between Copyright and Document Supply: Real or Imagined?

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Abstract

Document supply systems make documents more widely accessible than would otherwise be possible. Although this is sometimes achieved by lending, mostly copies are provided. This appears to conflict with the interests of the copyright owners but document supply is an extension of use rather than a substitute for purchase. Economic harm is not done to the publisher/author unless extra reward for extra use is seen as part of the publishing cycle. New technology may allow closer monitoring of copyright material but can also bring the danger of economic censorship. Librarians and copyright owners need to be clear about why document supply is so important in the research chain and not try to disrupt the flow of information on which both depend for their very existence.

Much of what has been written on copyright and document supply naturally focuses on the issue of photocopying for document supply services, but what is happening on the lending side in relation to authors' rights is both relevant and revealing. A number of countries have some form of Public Lending Right (PLR) which makes a payment to authors for loans of their works made from certain libraries. Public Lending Right is not necessarily part of copyright law because lending/borrowing is not usually an infringement of copyright but needs to be treated under other forms of law such as contract law. However, much of the thinking behind Public Lending Right has spilled over into the debate on copyright with confusing effects.

PLR has two main objectives: to reward the author for extra use of his works, and to compensate for loss of revenue because the books are borrowed by potential purchasers. The first of these criteria cannot be disputed: if the books are held in a library they are presumably used by the library's clients. Most PLR arrangements have a sampling system built into them to ensure that popular authors get some payment while those whose books rarely, if ever, leave the shelves get nothing. The argument that library books are used more than privately-owned books hardly needs putting, but the idea – that extra use should result in extra payment – needs careful study. So, although lending does not involve major copyright issues, it does set the scene for the debate on document copying and supply from remote sources.

There have been numerous debates on the rights and wrongs of document supply. In general the debate is mostly about copying articles from periodicals rather than large sections of books, as there is far less demand for the latter. It is tempting to talk of the two "sides" in this debate but this is a misleading and unhelpful concept. There are no "sides". A writer needs other written materials to stimulate his own ideas and what he writes is, in turn, used by others whose output he may once again use to further his own thinking. Authors need libraries, which need books, which need publishers, who need authors and so the circle goes round. This interdependence is at the centre of copyright. In the debate there are certain

common threads. Owners of copyrights see document supply as:

- 1) undermining publishers' sales;
- 2) depriving authors of financial benefit;
- 3) extending access at no extra cost;
- 4) allowing commercial and industrial interests to carry out profit-making research which brings no benefit to the author/publisher.

Users of copyright material see document supply as:

- 1) giving wider access;
- 2) improving intellectual activity;
- 3) economic use of resources.

By examining these points of view it may be possible to see a way through the conflicting arguments and positions.

The owners' view

Undermining sales

The argument is fairly simple to understand. If a library can obtain a copy of an article or part or all of a copyrighted work from a remote source, then it will not buy that document. Thus the making of the copy deprives the publisher/author of income because sales are lost. On the surface this seems very plausible,¹ but a number of studies have been carried out which have never found any correlation between an efficient document supply system and reduction in library acquisitions budgets.^{2,3,4} Libraries tend to buy as much as they can, as possession is far better than remote access. It improves user satisfaction, enhances the library's status and is far more effective in staff time and labour than making frequent requests elsewhere. Remote access to materials is seen by libraries as a necessity for those documents which it cannot justify owning itself or to which it cannot have access directly because of lack of professional skills, political barriers or other circumstances beyond its own control. In short, libraries would prefer not to use document delivery systems at all in a perfect world. Document delivery is a second-best for libraries and their clients.

Although there is no correlation between a good document supply system and cuts in acquisition, the converse is entirely true, in other words there is a direct correlation between cuts in acquisitions practice and a good document supply system. Libraries in almost all parts of the world are under severe financial pressure, with limited funds to carry out a wide range of functions. In order to support a core acquisitions programme of essential materials for its users, a library will more readily cut out material on the fringe of its needs if such material can be obtained by a good document supply system. A decision to cancel will be affected by the availability of the title elsewhere and its accessibility. A good document supply network will change the content of the list of titles to be cancelled but not the number or cost of them. Serials consume an ever larger proportion of acquisitions budgets and limited financial resources can be more rationally spent with document supply support. So a good document supply service will influence what is cut but not how much is cut.

Many libraries keep detailed statistics to show which journal titles are requested most from remote sources. Although the figures will vary from institution to institution the general principle is that if a title is requested more than a given number of times in a specified timespan then that title should be subscribed to because it is cheaper, more convenient and more satisfactory to clients if the title is readily accessible within the library.

Depriving authors of income

This argument carries very little weight. Authors of books are usually paid either by a lump sum or by royalties and, as already pointed out, lending (let alone interlending) has not been shown to be a substitute for purchase. Some authors do, of course, get some payments through PLR anyway. Authors of articles in periodicals rarely receive payment, and, if they do, the sums are not large and depend only indirectly on sales of the journal concerned. Some reproduction rights organisations are moving towards a system of payment to authors but this depends on the development of article identifiers such as those being researched by ADONIS and DOCMATCH to enable payments to be made efficiently. Some authors even have to pay to have their papers published. There is little evidence to claim loss of income for the creator of the copyrighted material.

Reward according to use

That document supply increases use is certainly true. The very essence of document supply from remote sources is to give access to materials which the reader cannot consult in his own library. The criticism is that this is extra use of additional materials at no cost to the user or the library requesting the material. This is certainly untrue. Document supply is an expensive business and libraries need to set aside considerable sums of money to carry it out. Even libraries fail to realise this adequately as a recent study has shown that only 13 % of libraries have a separate budget for interlending purposes. Expenditure goes on auxiliary services such as postage and packing, staffing and record-keeping, but some publishers feel that this extra money should go to the copyright owner. Here we enter the difficult area of the nature of property.

Should the copyright owner be paid according to the intrinsic worth of his product or according to the use it receives? With other objects, such as clothes, machinery or furniture, it is possible to estimate that an object will continue to function for a predetermined period given a set amount of wear and tear. In this sense the manufacturer can estimate life-expectancy and cost the item accordingly in the expectation that a replacement will need to be bought in a given number of years. This is not possible for information or even the documents which contain it as they can be photocopied almost limitlessly without deteriorating beyond the point of being used, given the right treatment. So, if we accept the principle that remuneration should be linked to use (as in most PLR exercises) there should be some payment to the copyright owner for document supply activities. But what should be the basis for calculating the payment? Document supply as a percentage of the total use of any document in a collection is very small indeed. Estimates of use of document supply and interlending by public libraries put this at around no more than 3 % of the total circulation figures.⁶ In the USA it is estimated that interlending constitutes only 0.43 % of all loans from public libraries.⁷ The recent ICSTI study of biomedical journals in the major document supply centres⁸ should that at the top end of use any one journal article might be used no more than twice and at the bottom end of the top-ranking journals usage is perhaps 0.2 uses per article. As this figure relates to articles in journals satisfying the top 20 % of demand only, actual use of articles in journals lower down the ranking table will be negligible. Therefore, if payment is to be made according to use, the level of meaningful remuneration will be very small and needs to be calculated using a fairly complex sampling system. In the UK there is no provision for payment by users of document supply services as it is assumed that the copies made come within the fair dealing and library regulations sections of the legislation. In the USA the CONTU guidelines recognise that payment should be made through the Copyright Clearance Center if more than five copies of articles in any journal title are requested from the last five years. This provides an element of payment for use above a certain level. Thus extra reward

for extra use is recognised by some countries but not others.

However, to follow the "payment by use" path is a dangerous solution. A position could be reached where only those articles which an editor judged would be well-read and heavily demanded through document supply services ever reached the printed page. These would be revenue-earners; others would have to be sacrificed as "passengers". This could lead to a situation where journals published only well-trying material, and new ideas, which would attract little use and therefore little revenue, would not be published. This kind of economic censorship needs to be viewed with considerable anxiety by researchers and creators.

Reward according to value

This is perhaps the area which has caused the greatest dispute in the last few years. The argument is not so much about how much copyright is done but the purpose for which it is done. Copyright owners argue that commercial and industrial libraries obtain copies of their documents and then use the information to create considerable wealth through their commercial activities. This argument is not about violation of copyright as such but is bound up with the question of the exploitation of intellectual property generally. If somebody invents something, then by taking the appropriate steps, the inventor can reap some benefits from it for a given number of years. By analogy, a writer ought to benefit from his writing for a limited time as well. But the very nature of publication requires that information be made publicly available, and, once available, anyone has the facility to use the information. Unlike a piece of machinery, there is no method of preventing the application of the information to other uses and it being exploited. This is one of the risks of being an author of any kind and the only real remedy under copyright law is resorting to sections relating to originality. There is no protection for ideas and certainly not for those whose ideas generate other people's minds. Therefore to introduce any element of discrimination against particular sectors because of the use to which they may put the information in any particular publication is alien to the concepts of copyright. In any event, prevention or charging for document supply for commercial use could only be justified at all if similar differential charges were made for publications when sold to such organisations in the first place. If the author reaps no benefit because his work is sold to industry rather than to the public library then why should different criteria be applied when photocopies of documents are supplied? We are in danger of introducing a sort of "droit de suite" into document supply, depending on the add-on value that is attracted by published information when what it contains is exploited for commercial ends.

The argument for excluding commercial concerns from having the same access to document supply as other libraries has been a long and bitter one in the UK. The copyright owners fought long and hard to exclude commerce and industry from this privilege but the Government were persuaded by the arguments in favour of document supply as a part of the information network. However, in other countries things have gone differently.

There are few signs of actual moves to prohibit supply: rather the trend is towards allowing supply in return for a fee, usually organised through a collecting society. Basically, the problem is that copyright owners cannot decide whether they want to claim recompense for income lost through the supposed loss of subscriptions and purchase or a share in extra income generated as a result of their intellectual activity. Only when this dilemma of reward by use or worth is resolved will there be forward movement to resolve the apparent conflicts between creators and users.

The user's view

Freedom of access

Document supply is a basic, although comparatively small, part of the freedom of access to information to which librarians and information scientists are so dedicated. The fact that a

particular document is not available in a given geographical area should not prevent the person wanting it from obtaining it. This is part of the basic work of the IFLA Programme for Universal Availability of Publications (UAP).⁹ Of course, there are other ways of consulting a document such as purchase, gift or travelling to another library, but these are not always possible, as must be obvious. Therefore documents must be moved to the user. To save moving the actual document and inconveniencing other users photocopying is used instead, where this is appropriate. Some would argue that as photocopying is only a surrogate for lending there is no problem with copyright, but this is clearly untrue, as a document can be copied many more times than it can be moved about from place to place.

It is rarely argued that such freedom of access should be denied, only that the copyright owner should benefit from this additional access. This has already been argued, but the information community still equates "freedom", with 'free'. Many copyright owners are happy to have their works used in document supply systems at a price. The argument is, however, that library services are usually free and the client should not be penalised because the library does not have what he wants, nor should the library be unnecessarily burdened because its clients have more specialised needs than it could reasonably anticipate. This is not seen as library funds being diverted away from the copyright owner's pocket, but rather as spreading resources to meet the needs of the maximum number of clients. It is argued that once a document becomes popular enough, even though it might normally be outside a library's purchasing profile, it will nevertheless be bought. Thus document supply actually becomes a good advertisement for the publisher.

Improved intellectual activity

Document supply enables scholars and researchers and those working at the frontiers of innovation to push their work even further because they have access to a wider range of materials than would otherwise be possible. Interlending allows this, but document supply speeds up the process and makes more material available to more people at any given time. It is also less of a financial burden on libraries than lending, because of the lower transmission charges, less record-keeping and no return postage to be paid. It also removes the time constraints from the client, as the photocopy is usually for retention rather than return. All these factors make document supply a more attractive choice. It also means that intellectual output from the writing community is improved in both quality and quantity and thereby benefits the publishers who need authors to carry out their activities.

Economic use of resources

In an age of severe financial constraint, libraries must use what resources they have to the best advantage of their clients. This means trying to provide as wide a range of materials as possible at the best possible price. Clearly not all libraries can buy everything their clients need, so resource-sharing is essential and document supply is one of the most efficient ways of giving access to the maximum amount of required material. Clients do not see any difference between a document on site and one hundreds of miles away; if they need it, they want it where they are as quickly as possible. Researchers view the world as their oyster and all collections should be available for their needs. Research grants no longer allow the travel that was once common for researchers, neither little option but to request that material be brought to them. Even so, they are rarely in a position to pay the cost to the library.

Use, not abuse

Document supply is not, in general, an abuse of copyrighted materials. It is an attempt to make products more widely available to those who could not otherwise afford them or justify

their purchase. The basic problem of the exploitation of intellectual content of the documents needs to be tackled, not through copyright law, but through other channels of intellectual property law. Copyright owners are anxious that their products should be used. The library community has a role in ensuring that these products are not abused.

Technological developments

With the advent of new technological processes in document supply, it is tempting to think that some of these issues will become more imagined than real. With the spread of online access to full-text documents, bibliographic searching linked to document supply and huge quantities of data now available on CD-ROMs, it would seem reasonable to suppose that the copyright owners now have all the technology they need to control access and charge for it whenever they see fit. On the other hand, in return for the appropriate payment, new technology will allow libraries access to materials which were previously almost beyond their reach except through slow and cumbersome processes. But copyright law is there to maintain the balance, and the mere existence of mechanisms may not be the best solution to the protection and access issues. Certainly there has been a move in legislation to be more pragmatic¹⁰, but, legislation is often a long way behind technology. Of the more straightforward issues, telefacsimile is one that needs careful attention. Many laws allow a copy to be made of a document for private study or research. But, with existing technology using Group III fax machines, in order to transmit a copy of a journal article or page of a book it is first necessary to make a photocopy and then use that photocopy for transmission by placing it in the feed of the machine. This copy was not made for private study or research but to allow transmission of the document to someone else. When the machine transmits the document it digitises it (a copy in the legal sense) and then copies it again when the digital signals are retransformed into a paper copy at the other end. Three copies at least have been made of the document. The wise librarian will also make a photocopy of the document received as latest experience shows that faxed documents fade quite rapidly. The problems will not be solved with the introduction of Group IV fax either. Although the need to make a copy before transmitting it will be abolished, the machines will have the ability to transmit to several different receptors simultaneously (multiple copying) and also store text and forward it at a later time. Similarly, recipients will have the ability to store and print out as and when required. All of this is outside normal copyright allowances.

The growth of audiovisual materials in libraries is a phenomenon of the last fifteen years. Originally simply teaching aids, they have now moved into the realm of original documents in their own right and carry information not available elsewhere, for example the BBC Domesday Project, which gives a picture of Britain in words and images on a videodisc and contains much original material. Under some legislation there is no facility for copying even small parts of such 'documents', yet is there really any difference in essence between information transmitted on the printed page or through another medium? The issues raised by electronic publishing and archiving are far more complex. They have been dealt with in some detail in connection with the Knowledge Warehouse experiment.¹¹ The issues include the fact that there are separate copyrights in any copyright work itself and in the electronic form in which it is stored; the ownership of the copyright in any database in which it is stored as a compilation and the copyright in any adaptation of the work made by the electronic publishers with the agreement of the original copyright owner as a 'value-added' product. How many copyrights might be infringed by a document supply service is not clear, but it is almost certainly more than one. Listening would seem to be the obvious answer, but this might give the copyright owners more control over their products than if they issued them in printed form, and what moral justification there would be for that is hard to say.

Just as much a problem is the arrival of the CD-ROM and the ADONIS Project. The technology is present in this project to allow all use of journal articles stored in it to be monitored minutely. This can be a very useful management tool for the publisher and librarian but it will also have the potential for editors to decide which articles should be retained in future discs, which topics are currently popular and which material should not, therefore, be accepted for publication because it is not heavily used and so, potentially, not a revenue-earner. The ADONIS software would allow a pre-use fee to be imposed for all users within a library, let alone use for document supply purposes. Again the balance between good management techniques and the spread of information must be maintained.

Finally, document supply by satellite is no mere fiction, as the APOLLO trials have shown. There are separate copyrights subsisting in "up-leg" (that is, from the transmitter to the satellite) the down-leg" (that is, the signal from the satellite to the receiver). Who owns the copyrights in the reproduced document, how legal it was to transmit it and who would be responsible for any infringement has not yet been decided.

Conclusion

Document supply and interlending will not go away. Far from it, it is a growing industry. The legal, economic and moral status needs to be clearly understood by copyright owners and users alike. Much emotional energy has been generated over the rights and wrongs of document supply and copyright law. Whilst new technology will enable us to keep track of what is done, it poses more problems than it solves in the legal field. A right understanding of the aspirations of creators and users will do much to allow the industry to see a way forward as an essential part of the dissemination of knowledge.

The conflict between document supply and copyright exists only if the owners are determined to press the PLR concept of additional reward for additional use. Otherwise the economics of interlending and document supply make it plain that this is no threat to the sales of copyright material. If a new philosophy of reward for use is introduced then, again there need be no threat. The philosophy is valid only if applied to all library activity and document supply is a small part of this. If clients and/or libraries must pay extra just to use materials then document supply will go along with this. Either way there is no threat. The conflict is more imagined than real.

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ISDS and Union Catalogues

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Abstract

The International Serial Data System (ISDS) maintains an international database meant for registration, unique identification and standard numbering of serials. An important share of Union Catalogues management deals with the same needs.

After having presented the organizational structures and working procedures of ISDS that account for the content of ISDS database, this paper attempts to define the good usage of ISDS by Union Catalogues.

Without evading issues that could introduce a new topic such as: "Changing role of ISDS because of Union Catalogues?", the authority file and bibliographic reserve ISDS maintains are assets that Union Catalogues cannot use as a fundamental basis for their management.

The purpose of the present paper is neither to present Union Catalogues nor to explain what International Serial Data System (ISDS) is but to try and define what could be and increasingly more often is, the good usage of ISDS by Union Catalogues. It will nevertheless be necessary to make a short introduction to ISDS, as a reminder and because the objectives and operating structures of the network are precisely what makes ISDS so useful to Union Catalogues. Then the advantages of ISDS will be presented and finally comments concerning practical issues.

I. BACKGROUND: A RAPID INTRODUCTION TO ISDS:

a. What's the purpose?

ISDS originated as a part of UNISIST from the recommendation that "an International registry of scientific periodicals should be established as a basis of a system for the normalization of the citations of the journal literature of science and technology".

The limitation to scientific and technological serials was soon abandoned and ISDS organized to establish an international registry for the unique identification of serial titles based upon the assignment of an identifying code (the International Standard Serial Number: ISSN) permanently linked to a unique title for each serial (the key title) together with bibliographic information to allow unequivocal identification of the serial and links to related titles (earlier, later titles; merging, splitting of serials, other edition statements...).

b. How does it work?

ISDS is an intergovernmental organization. It functions as a network of operational Centres: an International Centre located in Paris and a number of National Centres located in the various countries.

The International Centre is an autonomous institution established in Paris on the basis of an agreement signed by UNESCO and the French Government. Its statutes ratified in 1976 lay down the formal organizational structure of the system.

The responsibility for the establishment of National Centres rests with the national governments. When a country wishes to participate in ISDS, an official notification should emanate from its government, which announces its accession to the statutes.

In two parts of the world, National Centres have established a Regional Centre to coordinate some of their activities. There are now over 50 ISDS National Centres in all continents, dealing with serials in all possible languages and alphabets.

National Centres have sole responsibility for assigning ISSN to serials published in their respective countries and for establishing and maintaining the corresponding records.

The International Centre is responsible both for processing serials published by international organizations or in countries where no National Centre yet exists and for organizing common working procedures and checking and distributing the information produced by the network.

All ISSN assignments and the corresponding ISDS records are input in the international data base which is checked, controlled and maintained by the International Centres. This dual structure ensures both the "firsthand" processing at a national level and control of serial publications and the coherence of the system as a whole at an international level.

c. The ISDS Database

The function of ISDS is the identification, registration and numbering of serial publications. ISDS assigns an ISSN to serials regardless of their country of publication, language, contents or status.

The ISSN is an eight-digit code (including a check digit) according to international standard ISO 3297. Throughout the very diverse serial literature, its aim is to unambiguously individualize and identify each specific serial title.

When an ISSN is assigned, a corresponding bibliographic record is simultaneously created. The format for the ISDS record includes 30 data elements, some of which are mandatory, some mandatory when applicable, and some optional.

The two key elements of the ISDS records are: the ISSN and the key-title. The key-title is the title of the publication as ISDS standardizes it to make it unique. Most often the key-title is the title of the serial as it appears on the publication if there is no ambiguity, or sometimes the key-title is the title under which the serial designates itself, to which ISDS adds qualifying information in order to distinguish it from otherwise identical titles.

The ISSN of a serial publication and its key-title are inseparably linked: this is a fundamental rule of ISDS.

In case where the title changes sufficiently to warrant creating a new key-title, a new ISSN is assigned and a new record is established. Both records remain available, and a cross-reference is established through linking fields.

The abbreviated key-title is another essential identifying data element in the ISDS format. It is established in accordance with the international rules stated in ISO 4 and the List of Serial Title Word Abbreviations, for which ISDS is the maintenance agency. In defining the other ISDS data elements, particular care was taken to ensure compatibility with the International Standard Bibliographic Description for Serials: ISBD(S).

The ISDS data base contains all bibliographic records created by the system. The data base contains over 500.000 records and the annual growth is approximately 40.000 new records. Moreover, a continuous updating process results in the introduction of approximately 60.000 changes a year undergone by the publications.

II. WHAT ARE THE ADVANTAGES OF ISDS FOR UNION CATALOGUES?: MATTERS OF PRINCIPLE:

a. A unique identifier

Mainly, ISDS is an authority file for unique identification of serial titles, based on ISSN and a reserve of related bibliographic records.

Union Catalogues are meant for many. The main advantage of ISDS is that it sets up a common language for unique and unmistakable identification of titles. Union Catalogues are the results of the common care in different institutions to share their resources. Either at the early stage of establishing the Union Catalogues from various cataloguing institutions or in the final stage when the user wants to localize the serial he needs, there is an obvious necessity for a common name for a given serial. This is common sense for any Union Catalogue, it becomes of even greater importance when Union Catalogues are multinational. We are all aware that national cataloguing practices are not always strictly identical and even if it was so, who could, without international control be sure that a title which is unique in one's country does not exist in the same form in a different country?

Even national Union Catalogues, if they want to be used outside their national borders, which is increasingly more often the case, are concerned. The first advantage is obvious whatever the media of the Union Catalogues. It applies to printed Union Catalogues as much as Union Catalogues using new technologies.

b. Computer systems

If we take it for granted that unique identification is the only way when libraries want to share resources, this identification process could be of any sort:

- full text: a complete descriptive record according to strictly common rules
- a precise and formalized sequence of words: key-title or abbreviated key-title
- a numerical code: the ISSN

The advantages of ISSN in a computer system are many when creating, organizing and maintaining files for a Union Catalogue

b.1 Organization of the files:

ISSN is a code that can easily and unmistakably be the key wherever a specific serial needs to be cited or retrieved.

- it offers opportunity to organize the data in different files: one for bibliographic descriptions
one for holding statements
- it offers opportunity to link serials in a relational way. ISSN in a linking field will bridge to additional information in other records without repeating them.

It means security, sparing storage space, possibility to process sub-files and this can be taken into account from the beginning of the organization of the computer system.

b.2 Updating process for holding statements:

The possibility to distinctly store bibliographic descriptions and holding statements facilitate updating. In a Union Catalogue, even though serial literature undergoes more changes than monographs, the holding statements are less stable than the bibliographic records because of

new libraries joining the system and changes in subscription policies, for example.

For the participating library, it allows sending the ISSN and holding statements instead of sending a complete form to identify and describe the serial title. For the Union Catalogue management, in a parallel way, it means processing less information.

Once the information is processed, it also allows the Union Catalogues to distribute information on holding statements only without sending the related records. The ISSN allows matching with the information contained in the user's internal database.

b.3 Telecommunications:

Union Catalogues are meant for inter-library loan (ILL). If the user sends a request by mail, he will appreciate a simplified form rather than a full description of the title in order to be sure to obtain what he wants.

This is even truer when, as it is increasingly more often the case, ILL is based on telecom possibilities. ISSN means less information to key, less information to transmit, less information to process. And the security of speaking unequivocally the same language (compared to different ways of presenting titles, corporate bodies or transliteration schemes, which if not strictly identical, a computer will not recognize).

c. A bibliographic reserve

In addition to the advantages of ISSN and key-titles, ISDS database offers the 500.000 related records. Are Union Catalogues able to create 500.000 records when they are established and to maintain 40.000 creations and 60.000 corrections each year? Do they have the resources to catalogue in a short time (because Union Catalogues are needed and impatiently expected) the necessary records to create their original database and to track afterwards information about creation, splitting, merging, cessation of publication, changes in title... all over the world.

Moreover the dual structure of ISDS (National Centres and International Centre) guarantee the cataloguing:

- the serial publications are catalogued at a local level and the professionals in the country are best placed to follow the creation and history of the publication, to suggest key-titles and abbreviated key-titles and catalogue in their own language, or to classify according to the content.
- through the International Centre, the centralized processing of data guarantees, as far as possible, at least in terms of structure and uniqueness, the homogeneity and cohesion of the data.

Lastly, another advantage is due to the ISDS working procedures. ISDS is an open system. In addition to regular assignments, ISDS Centre assign ISSN or enter corrections, on requests from users when they are documented.

III. LIVING WITH ISDS: PRACTICAL ISSUES

As a consequence to what was said above we may assert that Union Catalogues derive many advantages from ISDS. It is nevertheless necessary to list a few practical issues that the users and ISDS in their common venture will face at the different steps of establishing and maintaining a Union Catalogue.

a. Creating a Union Catalogue database:

Union Catalogues choose to use ISDS records or some elements derived from them. If they decide to use integral ISDS records as such, they avoid the need for a common cataloguing structure: human resources, cataloguing software, common rules... The Union Catalogues will be sure that all records have the same structure, and are updated without extra-work... They will then be sure to concentrate on managing holding statements. If the Union Catalogue chooses to use only data from the ISDS records or to enrich the ISDS records with additional data, the following remarks apply all the same.

When creating the Union Catalogue database, there are two possibilities:

- either the Union Catalogue did not exist beforehand, and ISDS is a huge reserve to set up the system and have at the user's disposal bibliographic records to which holding statements are added without cataloguing delays and risks of duplicates.
- or the Union Catalogue existed in a form that is no longer satisfactory: in that case, the difficulty arises from the necessary matching of former data with the new system. This problem is to be faced in any case (with or without ISDS). The process will take more time but ISDS there too can be a help because of unique identification.

The second aspect deals with coverage:

- Historical coverage:
ISDS was meant for systematic registration but started in the 1970s. If the Union Catalogues deal with recent collections, the coverage will be much more satisfactory than in the case of large historical collections. The question of registering dead serials in ISDS network is not entirely solved because of the extra load of work it imposes on ISDS Centres that are organized for current registration mainly. ISSN up to now have been assigned on requests to dead serials everytime it was possible.
- Subject coverage:
The Union Catalogues are either multidisciplinary or specialized. The ISDS database is multidisciplinary. Specialized Union Catalogues will sometimes find fewer answers than general ones depending on the speciality, the weight of dead serials will be heavier or titles may come from countries with no ISDS centres where serial titles are not systematically registered ... Requests cause more delay.

In short, some other minor questions may arise because Union Catalogues and ISDS do not apply strictly the same coverage policy:

- definition of a serial may be at slight variance
- dead serials are second priority for ISDS centres; a title may exist in the Union Catalogue, which is dead and was issued twice fifty years ago. Is it a priority for ISDS?
- minor titles of local interest may not be registered systematically by an ISDS centre

There is no standard solution, these points are usually solved by assignment on requests but cause delay.

b. Maintaining the Union Catalogue database:

That is where the original enthusiasm due to the rapidity of creating the database from an available reserve sometimes fades away because there may be a difference in the working procedures and pace between Union Catalogues and ISDS.

– Amendments to existing records:

In a large majority they are a plus to the database but sometimes may be embarrassing: in the case of a change of title for example when ISDS assigns a new ISSN and key title. The criteria to decide that the change is significant may be at variance and Union Catalogue users may not be aware of it when they want to match their holdings with a former form of title. On the contrary, concerning dead serials, ISDS Centres generally limit assignment to one form of the title and make one related record and will consider other titles as variant titles.

Other amendments originate from the pre-history of ISDS database: corrections are still going on concerning ISSN that were assigned in Ulrich's or New Serial Titles and are validated (or not) when encountered. Duplicates, errors made by publishers when printing the ISSN on the serial may imply discrepancies and cancellations of wrongly assigned ISSN and though this very seldom happens in matter of percentage, it is always a shock for a Union Catalogue to see disappear a record related to holdings. A good follow-up of cross-references between cancelled and valid ISSN should greatly diminish the problem.

– Creation of missing records:

Usually the more used and successful a Union Catalogue is, the more libraries join in. After a time, the missing records to be added (or the existing records to be mended) are fewer but more difficult to handle because they are rare or dead titles. The creation is not the result of systematic assignment but implies a request: transmission to the concerned ISDS Centre, difficulty to find a collection there from which to register the title, procedure to update the database... cause unavoidable delay.

– Creation of new records:

In the previous case, delays may not easily be compressed. In the case of new records if there may be some waiting at the Union Catalogues, delays should be overcome.

Speeding up the updating process depends on:

- ISDS Centres situation: what are their human and technical resources? Are publishers aware of the pre-assignment? Do they inform the Centre? How does the Centre transmit the data to the International Centre: worksheets or magnetic tapes?
- International Centre abilities to process and distribute the data: computer system, facilities of external liaison, availability of human resources...
- Union Catalogue procedures: how does the Union Catalogue use the data received from ISDS? How often does it process it?...

The possible difficulties listed here above should not discourage the user. It is only meant to draw a realistic picture. Users are offered a lot but they expect more and everyday problems because they remain marginal should not cause one to overlook the immense resources found in ISDS.

IV. CONCLUSION: A SUCCESSFUL UNION?

ISDS is an authority file, rich of 500.000 records made unmistakably unique and systematically growing and improving thanks to an international network of operational Centres. It is meant to be a common language!

Union Catalogues may consider ISDS records answer their needs because it saves resources that can be better applied to specific Union Catalogues tasks.

Union Catalogues may consider they need enriched records because of specific needs. With ISDS, they are sure of an authority record and then can spend resources on additional descriptions that ISDS will not provide because it is not its purpose.

Union Catalogues may use any type of different information. ISSN and key-titles will remain the core of a common language for a more certain identification.

In conclusion, I would say that though some difficulties can hardly be avoided, the advantages of ISDS for Union Catalogues far exceed slight discrepancies or delays. Union Catalogues are exacting users: they expect records to be available as soon as they need them, they have large collections to register and suggest many creations or corrections. In other words, they have the same objective as we have: to make ISDS database as comprehensive and as accurate as possible. If I may venture an additional conclusion, I would say Union Catalogues are good for ISDS.

NOSP revisited

The changing roles of the Nordic Union Catalogue of Serials

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Abstract

NOSP, the Nordic Union Catalogue of Serials uses ISDS bibliographic data and combines this data with the holdings reported by the five Nordic union catalogues of serials. ISSN is the link between the bibliographic record and the holdings. Only titles with an ISSN are registered. 33% of the titles registered in NOSP are only held in one library of the 676 libraries reporting to NOSP. A directory of the reporting libraries is produced each year in hard copy or in machine-readable form. NOSP is available on microfiche or on tape. It is also available online in four of the five Nordic countries. The online version was the big challenge of the 1980'ies and it is suggested that the next technological change would be direct online ordering.

Background

NOSP, which stands for Nordisk Samkatalog over Periodica, is a joint venture, using International Serials Data System (ISDS) to produce a union catalogue of foreign serials in all five Scandinavian countries: Denmark, Finland, Iceland, Norway and Sweden. NOSP receives financial support from NORDINFO, The Nordic Council for Scientific Information and Research Libraries.

NOSP was the subject of many committees and reports for more than twenty years in the Scandinavian library community owing to the long felt need for a union list of serials for inter-lending purposes. The possibility to use machine-readable data and a financial grant from NORDINFO in 1977 initiated the work. A steering committee with one representative from each of the participating countries was appointed. It was decided that the coordinating work in connection with the establishment of NOSP should take place at the University Library of Helsinki, Finland.

Use of machine-readable bibliographic information was essential for the project as experiments had shown that the different use of cataloguing rules in the Scandinavian countries was a hurdle that could only be overcome by use of machine-readable data produced elsewhere. ISDS was chosen for the following reasons:

1. ISDS is an international system that uses a MARC format as input format and ISO 2709-1981, Documentation-Format for bibliographic information interchange on magnetic tape, as the exchange format.
2. The International Standard Serial Number (ISSN) assigned in conjunction with the key-title could provide a link between data bases.
3. The Scandinavian countries take actively part in ISDS and are represented on the ISDS Governing Board, at the General Assembly and at International Meetings of ISDS Directors.

4. All members of ISDS receive records in machine-readable form free of charge.

Reporting

It was decided to use *ISSN* as the link between the bibliographic record and the holdings. This means in fact that the reporting union catalogues from the five Nordic countries send a tape consisting of ISSN, library identification code, and the holdings. The tape consists of records with a fixed number of characters (44 characters for each record). It must be borne in mind that the fixed field format was decided upon in 1977, when use of tapes for transferring records between libraries in the Nordic countries was not common. The format has been subject to criticism because it does not conform to the standards used in most database systems at present, and the question is being discussed by the NOSP steering group. But a change of format does mean a change of programmes everywhere.

The *library identifying code* consists of four characters: x = country code – numerical, YYY = library code – numerical. It was decided to use numerals when reporting to NOSP but to change those numerals to the standard abbreviated forms of the libraries in question when producing the union catalogue. The code of The of Royal Library (Det kongelige Bibliotek) when reporting in machine-readable form to NOSP is 0060, where the first zero means Denmark but on the microfiche which was chosen as the medium for output the standard form used in Denmark DK: K is shown.

This way of solving the problems of library identifying codes in the Nordic countries was excellent and it paved the way for a new product *NOSP library directory* in hard copy produced since 1978. This is a very handy publication not only for those using NOSP as a union catalogue but also for everybody else interested in the different libraries in the Nordic countries. It contains information on 676 Nordic libraries, and is updated and published annually by the NOSP-centre. It is produced by the help of a microcomputer since 1986, and it is also available in machine-readable form.

Bibliographic record

The bibliographic record of NOSP is based on International Serials Data System (ISDS). NOSP was the first union catalogue using the ISDS records. By now there are about 20 union catalogues operating in more or less the same way. As ISDS is represented on the panel today I will not give any information on ISDS, but I would like to say that without the *support of ISDS* it would not have been possible to realize the dream of a Nordic union catalogue of serials.

There has been problems in using ISDS bibliographic records and I suppose there still are some problems, but we have always somehow managed to solve them in cooperation with ISDS. I will just mention some of them. *Only titles with an ISSN* are registered in NOSP as the linking element between the bibliographic record and the holdings of each library is the ISSN, and this means of course that a speedy registration at national ISDS centres is vital for NOSP. Thirteen ISDS centres now report in machine-readable form to the International Centre but this was not the case twelve years ago when we started using ISDS records.

Incompatibility between cataloguing rules for the national bibliography and ISDS rules has been another source of irritation, but this problem is also diminishing as the economic constraint is forcing the library community to solve these problems in order to achieve improved access to information.

ISSN's without ISDS bibliographic record has posed another problem which has been partly solved in close cooperation with IC by producing a supplement in 1980 using non-ISDS records. This supplement was incorporated in the main alphabetical file of the microfiche in 1984 in accordance with users' requests.

A *NOSP record* on the microfiche is a reduced ISDS record and consists of the following data elements: key title with the assigned ISSN, parallel titles, publisher, place of publication, data of first and last issue published. References are made to former and to successive titles and from issuing bodies.

Holdings

Holdings are reported in fixed fields on the tapes produced by the five Nordic union catalogues. The reporting and displaying of the serial holdings is at a summarized, condensed level. It is possible to report an ISSN and a library identification code without any holdings to report that the title is available. This is done by using two different transaction codes, one for reporting holdings, one for reporting availability.

Call number (shelf location) is not included, but it is possible to report composite holdings by numbering the sets when reporting. Incomplete holdings may be reported by using the code "L" which stands for "luckor", Swedish for gaps. If a serial is received but only retained for a limited period of time, it may be reported by using another code: "X". Both codes are displayed on the NOSP microfiche, which was the medium chosen for the production of the union catalogue.

Statistics

To sum up use of ISDS bibliographic records in connection with holdings data reported to the five Nordic union catalogues made it possible to coordinate and update serials information for the production of NOSP. The cumulated NOSP-mikro 89:2 consists of 133.200 titles with 527.000 holdings reported. The ISDS data base consists of 445.300 titles. Of the 133.200 titles reported to NOSP, 45.000 are only held in one Nordic library, that is 33% of the titles are unique.

Changes in the roles of NOSP

The first five years of NOSP were devoted to the *establishment* of the union catalogue and to getting the mechanisms for reporting by making use of existing resources to work. There was a strong competition from established Nordic subject oriented union lists of serials. These were often started by an idealistic group of librarians working in special libraries. We tried to solve the problem by extracting classified ISDS records from the ISDS database but this turned out to be a bad solution for two reasons. Many of the ISDS records lacked classification codes – the percentage of classified records in the ISDS database is now 80%. – The second and most important reason was that a close analysis of the union lists showed that a collection of serials in a special library consists of many different subjects and it is impossible to make a subject profile that would cover the whole collection. The only way of producing union lists of serials in special libraries by using NOSP would be by extracting the titles by using the library identifying code and this is only possible if all the special libraries concerned report to their national union catalogue which was not always the case.

User evaluations showed that NOSP was not comprehensive enough and the lack of titles was a source of "concern". We tried to solve the problems by producing a supplement using other sources than ISDS for bibliographic data in cooperation with ISDS. We asked the participating libraries to take photo-copies of titlepages of serials did not have an ISSN and sent those to the International Centre or to the national centres. A joint meeting of staff from Nordic national ISDS centres and from the union catalogues was arranged in 1985 and another one took place in 1988. The first meeting was perhaps not as successful as the second in solving problems. Co-operation with the libraries and the ISDS centres is now established standard practice in the union catalogues and in the NOSP centre.

The most important change in the role of NOSP was the *online version*, which was established in 1981 in Helsinki for a limited period of time. The main political issue in 1982 was to decide if the database should be central or distributed. It was solved by the Swedes loading a test tape in the LIBRIS database in December 1982. It was obvious that it was great advantage for verification of ISSN. Norway felt that NOSP data was more important than ISDS and bought tapes from NOSP, including the ISDS bibliographic data in 1985. Norway later decided to make ISDS bibliographic data available online, which made it possible to find ISSN and add those found to the records in the Norwegian union catalogue of serials, SAMKAT PER. Finland put NOSP online in 1987, and Denmark, after a long political fight, finally decided to do so as well, after pressure from librarians working in interlending departments of research libraries.

The online versions of NOSP data differ, which was to be expected but use of NOSP data is the same everywhere in the Nordic countries. It is used mainly for *interlending purposes* although it also has potential for shared information on the acquisition of new titles and intended cancellations. It could also be used for *collection analysis* in terms of strength and overlap of titles and this might be a new role of NOSP as new statistical programmes are developed.

The online versions of NOSP did not affect the sale of the microfiche version in a considerable degree, but it has to be kept in mind that the microfiche version holds more information than the online version that is bibliographic records from other sources than ISDS. The NOSP steering group is looking into the possibility of producing a *CD-ROM* version, but no decision has been taken so far.

Future developments

The librarians in the Nordic countries are now able to trace the location of serial holdings in NOSP either on microfiche or online. The next step is to develop online ordering service via PC's and networks. This is already possible to some extent in Denmark and this facility should be extended to the other online versions in the Nordic countries. A user-friendly interface developed by two Nordic firms (CRI and AXION) called IANI (Intelligent Access to Nordic Informationsystems) makes it possible to switch from one Nordic bibliographic database host to the other and in this way get access to NOSP data. By using electronic post and/or telefax in connection with online ordering the end-user would get the document when he needed it. The role of NOSP would then change from being an instrument for location of information to providing information.

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Automation and the Union Catalogue

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Abstract

Fundamental changes have taken place in the service to users as a result of automation of union catalogues of serials. But what will suit one particular group of users or one country will not necessarily suit another. Automation, linked with networking has provided flexibility and enabled 'catalogues' to be tailored to needs. This paper traces some of the developments in automation from the early use of punched cards and paper-tape to sophisticated on-line full-text systems which must necessarily incorporate a union catalogue of holdings.

Introduction

Automation and the union catalogue – this paper could have been a description of the application of automation to serials records and locations from the early use of punched cards to the sophisticated online full-text system which must necessarily incorporate a union catalogue, and is capable of being networked throughout the world. But this would have concealed the importance of automation to union catalogues of serials, and the fundamental changes which have taken place in service to users resulting from this automation and associated networking.

The needs of users

This paper attempts to put this subject on its head and to investigate the users' need for serials and how these can be met by automation. What will suit one group of users or one particularly country may well not meet the requirements of another. One thing above all others that automation of library records has taught me is that automation increases the available options, and this can be no bad thing. Before the advent of automation we struggled to maintain union catalogues of serials manually. These were either in card or sheaf form which could only be accessed by a visit to the site, or in printed form, which in the UK for example meant BUCOP (British Union Catalogue of Periodicals) which was maintained by the National Central Library – now part of the British Library Document Supply Centre.

Early developments and the value of union lists of titles and locations

One of the earliest union catalogues of serials in machine-readable form in the UK was the *Union List of Periodicals in Institute of Education Libraries* the 1966 edition of which served as a test file for the basic programs of the Newcastle File-Handling System. A two chain record structure was used, but the sorting of entries was done by hand. Each entry gave the title followed by the holdings of the twenty-two co-operating libraries and the result was printed on a line printer.¹

This was a list of titles with holdings attached and although today one would expect such a holdings list to be produced by more sophisticated automation methods I would maintain that such a list still has a useful place in the scheme of things. Let me give you two examples:

1. *Essex Union List of Serials* which is a microfiche list of the serials material held within Essex County Libraries and the Libraries in and near Essex with which it co-operates.

2. The *NEWSPLAN* projects by which the British Library and the UK Regional Library Systems list the titles of all local newspapers together with their holdings.

The Essex Union List like the list of title holdings on a university campus allow the reader to consult this material at the cost of short journey or to obtain a photocopy from a co-operating library at little cost. The *NEWSPLAN* lists not only identify titles and locations but provide the basis for a programme for the microfilming and preservation of UK local newspapers which are a valuable and popular source for research in all subjects.

Both the Essex and *NEWSPLAN* lists are held in machine-readable form but whereas the Essex list is published twice a year on microfiche and is out of date as soon as it is published, the *NEWSPLAN* lists by their very nature are not subject to change and illustrate the continuing value of this form of union catalogue of serials.

The problems associated with large union catalogues location data

In fact the larger and more comprehensive a list of serials with location holdings becomes, the more difficult it is to keep it up to date, and I speak here from bitter experience. LASER (London and South Eastern Library Region) has been involved for many years with the LASER Union List of Periodicals (LULOP).

Published first in 1946 as the London Union List of Periodicals and going through two further manual updates in printed form it was scheduled to be maintained in machine-readable form by LASER in the 1970's and has been a thorn in the flesh ever since. The problem at that time was not only the difficulty of keeping the title and locations information up to date, particularly as it was the practice to record branch as well as library system holdings, but the cost involved in setting up an automation system and keying in the records, in relation to the price for which the finished product could be sold.

LASER, with the assistance of the member libraries in the co-operative prepared a number of proposals, but in each case of marketing exercise showed that sales would be unlikely to cover costs and as little or no subsidy was involved the projects were dropped. Every effort was made to use the developments in automation which were being introduced in the late 1970's and early 1980's such as the ISBD standard for serials and the ISSN numbering system but these proved to be of little value.

ISBD(S) and ISSN

We were conscientious in confirming to the ISBD(S) standard, but few if any of the sets of serial title records available to LASER for purchase conformed to this standard and matching of records was difficult if not impossible.

In those early days the use of ISSNs (International Standard Serial Numbers) was complicated by what we knew as the "Bowker" numbers. Bowker having anticipated the introduction of ISSNs by the introduction of its own numbers, there was no single authoritative list and libraries notifying LASER of additions were using the Bowker numbers which appeared in the Ulrich Directory. All in all it was a difficult situation and it is only recently that advances in automation and networking have made it possible to contemplate an online version of LULOP.

Union catalogues without detailed holdings statements

The initial work in this advance was the creation in machine-readable form of serial records without detailed holdings statements which were published in printed form. A current example of this type of union catalogue is *Serials in the British Library*² which lists all new serial titles, including serials received through legal deposit, acquired by the London-based

collections of the British Library. The serial records in this publication are derived from three MARC files, namely BNB MARC (the machine-readable equivalent of the British National Bibliography), the current catalogue of the British Library Humanities and Social Sciences and the current catalogue of the British Library Science Reference and Information Service.

The principal bibliographic aids supporting the British Library's document supply service for serials which serve a similar purpose are *Current Serials Received*³ and *Keyword Index to Serial Titles*.⁴ The former is a list of titles arranged in alphabetical order similar to that used in the *World List of Scientific Periodicals*. It provides no detailed bibliographic information but lists shelf mark and location for each title, and is undoubtedly a union catalogue of titles and holdings.

Keyword indexing

The *Keyword Index to Serial Titles* or KIST as it is known is issued quarterly on microfiche. It illustrates par excellence, the effect of automation of union catalogues. The fact that the records are held in machine-readable form makes keyword presentation and the production of magnetic tape for COM output on fiche perfectly feasible. Thus automation has enhanced the value of these union lists by keyword access and by reducing the cost of production compared with print on paper.

CD-ROM

A more recent development in automation, and the one of particular interest to me as Director of LASER, is the CD-ROM. This technology has been applied to a number of bibliographic and information databases, but an example most relevant to my subject today is *Boston Spa Serials*.⁵ The British Library Document Supply Centre on CD-ROM. This 'union catalogue' includes the holdings of The British Library Document Supply Centre, The British Library Humanities and Social Sciences, The British Library Science Reference and Information Service, Cambridge University Library and Science Museum Library. It has 366,000 titles on a single disc, adds 35,000 new records and 80,000 amendments each year. It can be used for title verification, location and record creation and can also be used for Wildcard and Boolean searching.

The ability to download records from the CD-ROM for the creation of local system is one of the attractions of this technology and is the subject of discussion between LASER and BLDSC regarding LULOP.

This area of the automation of union catalogues of serials has altered our perception of the creation and use of these catalogues. Automation has made it practicable not just to have the lists of titles available but to use these union catalogues through keyword/subject access for information retrieval purposes.

Single input – multiple output

Stella Keenan in her chapter on Abstracting and Indexing Services in *Serials Librarianship*⁶ has put it very well:

“As the major services have shifted from manual to mechanized production systems, two radical changes have occurred in the production process. This is the idea of ‘single input – multiple output’ ... The basic concept of ‘single input – multiple output’ is that the bibliographic and intellectual analysis (abstracting, indexing, categorizing, etc.) is keyboarded once and checked for accuracy. The record can then be used over and over again as required. This production concept is the basis of mechanized bibliographic services being produced today. The basic idea of ‘single input – multiple output’ means entering information into the file once only, checking the record to ensure absolute

accuracy and tagging for later retrieval all the useful information elements in the record. This multiple use of the record allows not only manipulation within the main published product for entry under more than one heading or for index generation, but also its re-use in subsets of the main file. Pre-packaging allows large discipline-based services to produce specialized smaller and cheaper information services aimed at a particular interest or speciality."

Other developments in automation

The reduction in the cost and size of computer storage in recent years has made it possible to add further information to the bibliographic record. Contents page listing is a feature of the design of contemporary lists.

MEDICAL SCIENCE WEEKLY published by Elsevier, is a current awareness service providing details of the complete contents of over 1,000 of the most important medical and biomedical journals. The interesting aspect of this publication is that it is produced on floppy disc. LASER is producing a newsletter on this medium. This newsletter is obviously not a union catalogue of serials but the advantages of PC diskettes over the CD-ROM indicate that the diskette may serve a useful purpose for production of small union catalogues. In *Information Technology Notes*, issue no. 65, December 1989 the advantages of the diskette over the CD-ROM are said to be many:

"Its low production cost for trials and short runs enables many more publishers to become involved. Small files can be accommodated easily, and maybe produced more frequently, so that information can be kept more up-to-date. Floppies can generally be marketed cheaply enough to provide a personal service, and can be copied easily, subject to copyright restrictions only.

No special equipment is needed to receive the diskettes, so that those who have PCs already have the user technology required. They are also likely to have the skills required to run the programs provided.

A final benefit to diskette publishing is that the disks can be used both as an immediate package of limited volume current data plus search software, and as a medium for transactions to update an external system."

I have moved a long way in this paper from the punched card and paper-tape input which characterised the early efforts to automate union catalogues of serials and you may well say "What do we mean today by an automated union catalogue of serials."

Full-text retrieval

I would answer you by asking as I did at the beginning of my paper. "What do our users, many of whom are sophisticated users of information retrieval systems, expect of union catalogues of serials?" They undoubtedly would like subject and/or keyword access as well as title access. May they not be expecting fulltext retrieval?

Developments in electronic document storage by the use of digital technology and the delivery of this material by Group III and Group IV fax machine make this service a reality.

ADONIS

The ADONIS project which began experimentally in 1987 is based on bio-medical literature and accepts the concept that if new technology can be used to fulfill requests for journal articles rather than by labour intensive procedures, the savings can be shared with publishers. The original ADONIS partners consisted of Blackwell Scientific Publications, Elsevier Science Publishers, Pergamon Press and Springer-Verlag. Later Academic Press and John

Wiley joined the group. The establishment of scanning bureaux to cope with the demands of the European Patent Office, was able to give the ADONIS project the service it required. The agreement of a number of large document supply centres including BLDSC in the UK, CDST in Paris, the Medical Library in Cologne and the Royal Academy of Science in Amsterdam to take part in the experiment, enabled the project to proceed.

The ADONIS document delivery service on CD-ROM, after a successful two-year trial, is to become a fully operational service by 1991. During the trial some 50,000 prints were supplied from centres with ADONIS work stations from 217 biomedical journals from ten of the largest scientific publishers. For the operational service some 425 heavily used journals of interest to the pharmaceutical industry will be involved.

Optical disk-based systems

ADONIS is an interesting concept but let me look further into the future to an optical disk-based system able to store the article images and print them out on demand. Such a system is in use at the Information Services Division of the UK Home Office Forensic Science Service at Aldermaston. A union catalogue of articles which can be printed out on a LASER printer or faxed on demand? The French "Foudre" system using Group IV fax is operating a similar system for the transmission of journal articles, and the OPAL Library System, the Optical Automated Library⁷ is used by the UK Express Group of newspapers for a reference library on a journalist's desk. The potential for storage on optical disks is enormous one could almost say astronomical.

The problems of less developed countries

Inevitably my paper has dealt with developed countries and in particular the UK the country in which I live and work. I accept that there are many countries of the world where the technologies I have referred to in the latter part of this paper seem figments of the imagination. I was particularly struck by a recent article on *Library Co-operation in Kenya* by Japhet N. Otike⁸ which spoke of the scarcity of bibliographical tools as being one of the factors inhibiting library co-operation. Although a union list of periodicals for libraries in east Africa exists, the last edition came out in 1975 and since then it has not undergone any revision.

I see the development of inexpensive work stations cum PCs using floppy disks to produce union catalogues of serials, as a possible answer to some of these problems if resources are made available. The use of records already produced in machine-readable form – "the single entry-multiple use concept" – is surely one that we should accept throughout the world. None of us have enough money, we must all co-operate in the use of scarce resources if we are to improve services to our users.

I believe that the expectations of our users for access to serials makes the "union catalogue" of serials of increasing importance. The automation of records and texts combined with sophisticated telecommunications networks can and will provide the technology to meet these needs. I find it an exciting world in which to live and work.

Networking

Finally, I would like to suggest that networking, using Open Systems Inter-Connection (OSI) has added a new dimension to the concept of the union catalogue.

OSI will enable the user to search computerised union catalogues with different searching mechanisms and held on different computer systems.

The European Commission has recently accepted a proposal for an Open Systems Inter-Connection (OSI) pilot/demonstration project between library networks in Europe for inter-lending services. The project arose from the Commission's call for 'declaration of interest' in

pilot or demonstration projects designed to promote competitiveness and develop the information service market in Europe. The participants in the project are:

London & South Eastern Library Region (LASER), in the United Kingdom
Pica Centrum voor Bibliotheek automatisering, in The Netherlands
Ministere de l'Education Nationale, Direction de la Programmation et du Developpement Universitaire, Sous-Direction des Bibliotheques (SDB), in France.

The major objectives of the project are:

- (i) to achieve interconnection between three computerized library networks in the United Kingdom, in the Netherlands and France in order to support and develop international interlending and messaging services
- (ii) to improve the efficiency of international interlending services
- (iii) to demonstrate the capabilities of OSI communication protocols in a message-oriented environment for interlending services in the interconnection of computerized networks with different technical characteristics.

The project, which will last nearly three years, is being co-financed by the participants and the Commission of the European Communities (DG XIII B). The total cost of this development is 2,579,000 ECU's.

Three phases of development are planned:

- (i) the specification of technical, functional and service requirements for the interconnection of three interlending networks
- (ii) the implementation and operational testing of the OSI communications based ILL system
- (iii) the use and evaluation of the system by fortysix libraries in the U.K., the Netherlands and France.

As a result of these developments, the three networks will be linked via the international X.25 service and will provide international loan message and identification services. The international loan message service will be based on the OSI interlibrary loan (ILL) and X.400 message handling protocols. This message service will be interfaced to the existing national ILL services. Identification services to enable the user to search computerized union catalogues with different searching mechanisms and which provide information on the ILL services and sources of materials within the U.K., the Netherlands and France, are also planned ultimately, i.e. a joint union catalogue of holdings in these countries.

The databases which form the basis of these networks hold titles and location holdings of monographs as well as serials, but do they not provide a foretaste of the union catalogue of serials for the future. What after all is an automated union catalogue of serials?

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